Low back pain

Patient in medium age complain of Low back pain ?

Causes of back pain

•Soft tissue injury or overuse.

sprains or strains of soft tissues such as ligaments and muscles

Pressure on nerve roots

Arthritis, & fever



Low back pain

Pressure on nerve roots.

Different causes of low back pain

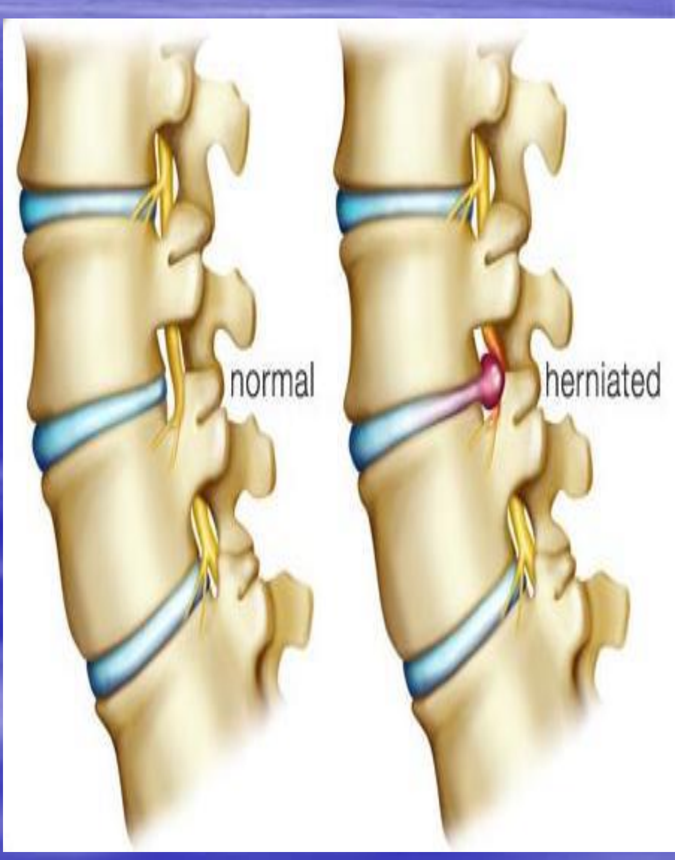
Lifting improperly

Sudden & incorrect movement

Falling down

Carrying excess weigh & wrong

Poor posture



Symptoms for referral in low back pain

- Numbness
- Tingling & stinging
- Sciatica pain
- No ability to stop on fore foot سقوط القدم
- Problem in bowel or bladder function
- Accompanied with fever
- No improvement with O.T.C drugs

Lines of treatment of LBP

- Muscle relaxant with counseling before prescribing
- Systemic NSAIDs with paracetamol
- Local NSAIDs
- Local Rubifacient drugs
- Heat therapy

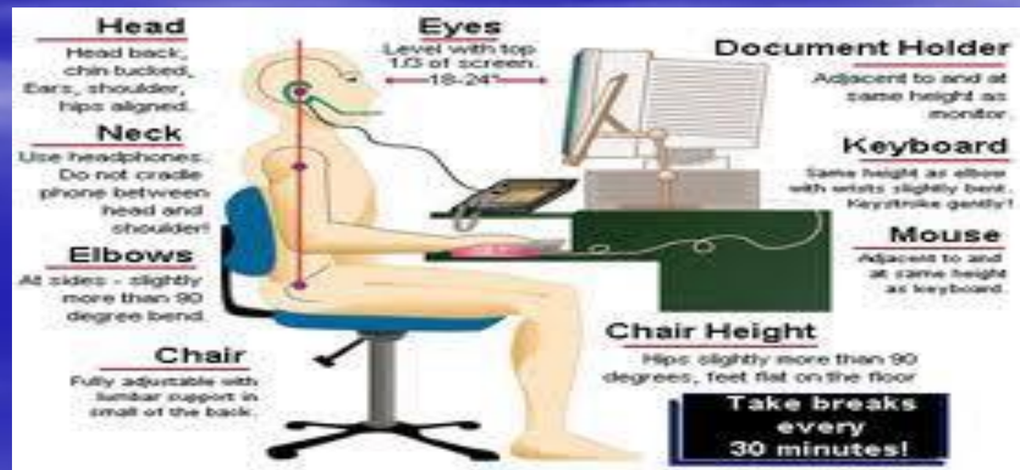
- Cross sales or supportive treatment Vit. B , Neuropathic pain drugs , massage equipment , lumbosacral belt ,

Patient education with L.B.P

- **Bed rest is recommended** for short periods (up to 48 h) for simple low back pain.
- **•Weight lifting should be avoided as long as the pain persists.**
- **•Watch your weight**. Being too heavy, especially around your waist, puts extra stress on your back.
- **•Exercise**, Get regular, low-impact exercise. Stretch before you exercise.
- **•learn the right way to sit, stand, and walk**.

Patient education with L .B.P

- "Good posture" generally means your ears, shoulders, and hips are in a straight line.
- •**Wear low-heeled shoes** that have good support.
- •**learn the right way to sleep,** Sleep on your side**.** A medium-firm mattress may put the least stress on your back.
- •**learn the right way to lift.**



Exercise with low back pain





Joint sprain complain

Patient in puberty age complain from rest sprain

Types of sport injuries

•**Strain**, injury to a muscle, often caused by overuse, resulting in swelling and pain.

•**Sprain**, a sudden or violent twist or wrench of a joint causing the stretching or twisting of ligaments, and often rupture of blood vessels with hemorrhage to the tissues.

•**Fracture**, a break in a bone or cartilage

- **Dislocation**, displacement of one or more bones at a joint
- •**Bruise (contusion)** capillaries are damaged, allowing blood to seep into surrounding tissue.

Symptoms of joint sprain

- Occur suddenly while playing or exercising
- •Sudden, severe pain
- •Swelling
- •Inability to place weight on a limb, hand or foot
- •Extreme tenderness in the area involved
- •Extreme weakness in a leg or arm

Referral cases

- severe pain,
- •Swelling increase
- •numbness
- •A limb cannot bear weight
- •A bone or joint visibly out of place.
- •A limb, hand, foot or digit is immobilized
- •An old injury hurts or aches
- •An old injury swells
- •Bruising without apparent injury
- • Treatment failure after 5 d

Treatment & advice

- NSAIDS systemic & local
- Paracetamol with opioid
- Fixation using suitable compression
- Advice remember word (rice) means rest , ice , compression , elevation
- Other patient education : in next slide
- Cross sales ice bag , walker , canes , crutches

Other patient education

- •Compression is given the highest priority
- •in acute phase use ice then (1 or 2 days after the injury), heat compression can be useful.
- •Sport activities should be avoided as long as the patient’s pain persist.
- •Avoid massage of the affected area during the acute phase of the injury.
- •A safe return to play is only possible when the patient feels neither pain nor discomfort. & not return to play under medication

OSTEOARTHRITIS



Old age patient complain from joint

Pain as (Knee joint)

Differential diagnosis with rheumatoid

Depend on the following

Age

Joint affected (bilateral , symmetrical)

Symptoms on joint

Stiffness of joint in the morning

Onset of symptoms

Rhmatoid nodule

Healthy state & other symptoms

OSTEOARTHRITIS

- Risk factor
- Advanced age
- •sex where female more affected after 55 year
- •Muscle weakness
- •Obesity
- •Joint trauma
- •Repetitive stress
- •Heredity, congenital or developmental anatomical defects.

OSTEOARTHRITIS

refer to the physician when

There is confusion with

Rheumatoid

Loss of motility

Sudden onset of symptoms

Treatment

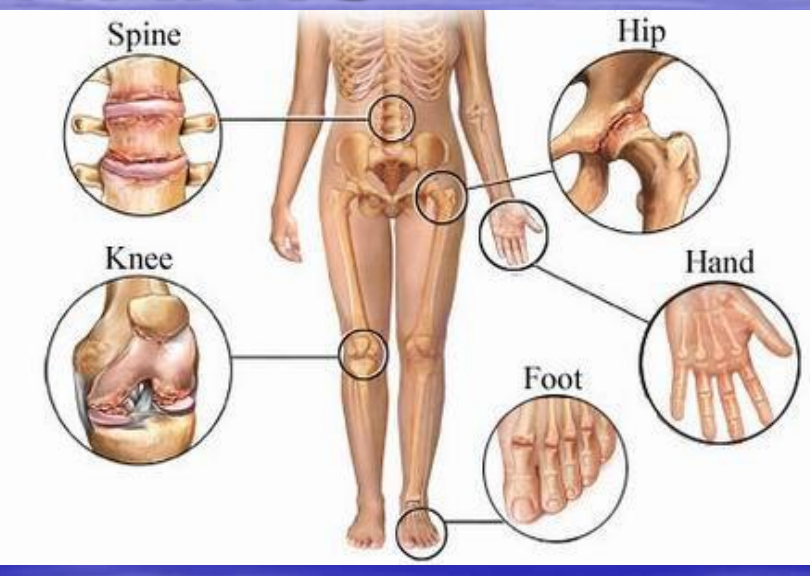
Paracetamol : the First choice

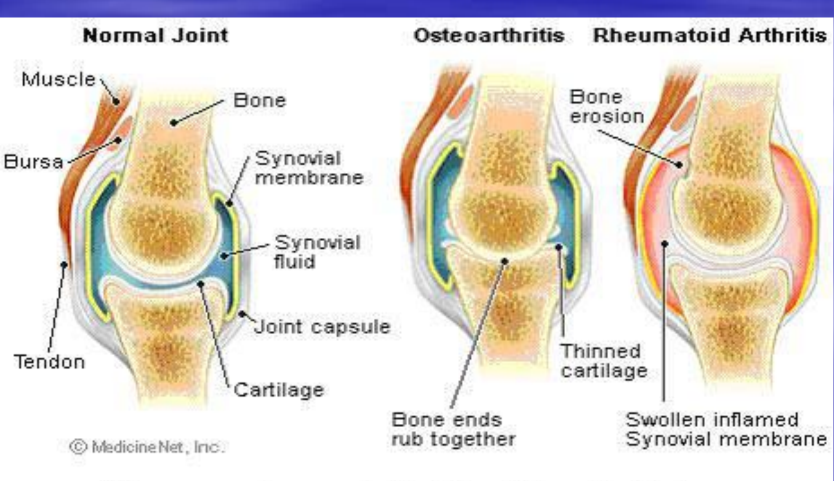
Combined paracetamol

NSAIDS (systemic & topical

Adjunctive therapy

Neuropathic & Ms relaxant d





OSTEOARTHRITIS

Adjunctive therapy as the following :

Glucose amine sulphate

Chondroitin sulphate

Omega 3

Gincobuluba

Avocado extract

Methyl sulphonylmethan

(MSM)

………



OSTEOARTHRITIS

Patient Education of OA

Weight control remember that increase one part on the weight lead increase 4 part stress on knee joint

Exercise

Heat may relieve pain

Support devices

Knee support , or other support

Heat bag (thermal therapy)

Canes , walkers , crutches , different types of insole

Different type of massage devices

Dysmenorrhea & PMS

- Complain of pain in young age girl with the period
- Differential diagnosis between ;

Primary dysmenorrhea , secondary dysmenorrhea , PMS

- Dysmenorrhea means Painful menstruation
- PMS : premenstrual syndrome : distress physical , psychological , & behavioral symptoms , floating before menstruation from 3 – 5 days
- Cause of dysmenorrhea
- Overproduction of prostaglandins, which cause the contractions that shed and expel the endometrium

Dysmenorrhea & PMS

increased production of vasopressin, which increases both the synthesis of prostaglandins and myometrium activity.

Prevalence of dysmenorrhea :

PD in young women range from 45 to 95%.

5–20% of young women report that PD is so bad that it interferes with normal daily activities.

The differential diagnosis of PD & SD depend on

- Age
- Vaginal discharge & Pelvic infection
- Nature of pain (intermittent colicky , cramp , radiate back) , but continuous , dull , diffuse in abdomen

Dysmenorrhea & PMS

- Period regulation & bleeding with menstruation & during the period
- Other symptoms : PD nausea , headache , but SD painful intercourse
- **Referral symptoms** any symptoms related to SD
- Age above 30 year
- Pain at the end of menstruation due to possibility of ectopic pregnancy
- Fever
- Pain not respond for treatment

Dysmenorrhea & PMS

Lines of treatment ;

- NSAIDs as ponstan
- Antispasmodic as buscopan
- Heat therapy
- Hormonal by physician as oral contraceptive
- Cross sales different supplementation as the following :
- •Thiamine at a dosage of 100 mg daily was found to be effective in treating dysmenorrhea or Bioyeast as natural sourcse
- •The use of vitamin E 800 IU/day significantly decreased the pain of primary dysmenorrhea, or wheat germ oil

Dysmenorrhea & PMS

- The omega-3 fatty acids in fish oil are thought to have anti-inflammatory effects. Omega-3 may relieve dysmenorrhea by affecting the metabolism of prostaglandins and other factors involved in pain and inflammation
- •Magnesium The researchers reported evidence of reduced levels of prostaglandin F 2 alpha
- Isoflvon (Primrose evening oil , vit., E , …
- Primrose evening oil
- Personal hygiene & intimate wash

Dysmenorrhea & PMS

Patient education :

- Exercise decreases the severity of menstrual cramps through generation of endorphins, ‘the body’s own painkillers’.
- Avoid smoking, as this has been associated with increased menstrual pain and heavier bleeding
- Both a low-fat vegetarian diet and fish-oil supplements

Dysmenorrhea & PMS

PMS :

The symptoms not during the menstruation but before it by 3 – 5 day , the symptoms psychiatric symptoms also , floating , …

Lines of treatment & cross sales as PD & add the following in the treatment :

- Antidepressant , anxiolytic , sedating ex. Of natural product as procolamil , passiflor , …..
- Diuretic but can use natural source as green tea
- Hormonal by physician as progestrone as (duphaston) & indicated from ovulation date till end of period

Tooth pain



References:

- Chapman, C.R. & Stillman, M., (1996). Pathological Pain, Handbook of Perception: Pain and Touch. In L. Krueger Ed., p. 315-340), New York: Academic Press.
- Leininger, M. (1997). Understanding cultural pain for improved health care. *Journal of Transcultural Nursing*, 9 (1), p. 32-35.
- Lewis, S.M., Heitkemper, M.M., & Dirksen, S.R., (2004). Pain. In P. O'Brien, J. Giddens, & L. Bucher (Section Eds.), Medical-Surgical Nursing: Assessment and management of clinical problems. (6th Ed., p. 131-158). St. Louis: Mosby.
- Stevenson, K. & Roberts, K., (1999).UWHH On call guide for the patient in pain. (2nd ed.)

Pain Physiology Web Sites

- http://painresearch.utah.edu/cancerpain/neurax.html
- http://www.northarundel.com/aniplayer/
  - Click on Brain and Nerves
  - Scroll down to click on Feeling Pain, Nerve Conduction, and/or Reflexes